SALT RIVER AT 67TH AVENUE FCD GAGE ID# 4758

STATION DESCRIPTION

<u>LOCATION</u> - The gage is located on 67th Ave and the Salt River, south of Southern Avenue. Latitude 33° 23' 51.1" North; Longitude 112° 12' 12.6" West. Located in S30 T1N R2E, in the Fowler 7.5-minute quadrangle.

ESTABLISHMENT - The gage was installed July 14, 2008.

DRAINAGE AREA – Not Determined

<u>GAGE</u> - The gage is a pressure transducer type instrument. The PT diaphragm is at gage height -0.35 feet gage height, levels of August 7, 2008. The PT is located on the east side of 67th Avenue.

There is a status sensor located near the PT. It is at elevation 4.1 feet gage height, levels of August 7, 2008.

There is no crest-stage gage at this site.

There is no staff gage at this site.

ZERO GAGE HEIGHT – Zero gage height is the invert of the rightmost culvert on the upstream side of 67th Avenue.

<u>HISTORY</u> – Gaging established on July 14, 2008. No previous gaging history at this location.

REFERENCE MARKS

RP-1 is a chiseled 'X' on the left upstream corner of the culvert headwall. Elevation 5.08 feet gage height, levels of August 7, 2008.

<u>CHANNEL AND CONTROL</u> - The control for this gage is the culverts under 67th Avenue. Once the water level crosses 67th Avenue, the main channel begins to be the control.

The culverts are 48-inch reinforced concrete pipe, approximately 62 feet in length.

RATING - The current rating is Rating #1, dated July 14, 2008. The rating was developed from survey data collected from the culverts and the road crossing. The culverts were

analyzed using HY-8 program. Flow over the road was estimated from a Manning computation.

<u>DISCHARGE MEASUREMENTS</u> - Direct measurements would be possible in the channel downstream at low flows.

POINT OF ZERO FLOW - The PZF is at about 0.0 feet gage height.

FLOODS – Runoff of about 17,800 cfs and 9.5 feet gage height occurred on January 22, 2010.

REGULATION - None known.

DIVERSIONS - None known

ACCURACY - Fair

<u>JUSTIFICATION</u> – Monitor flow in the river for MCDOT to manage low-flow road closures.

<u>UPDATED</u> - July 20, 2011 D E Gardner